Drug Use Behaviors:
A Review of National and State Trends

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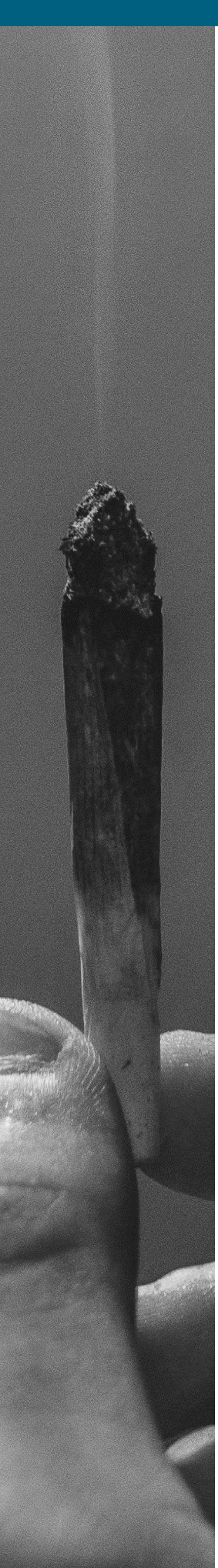

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Report Details

Support and Training for the Evaluation of Programs (STEPs) at the University of Nebraska at Omaha is a leader in conducting evaluations of and needs assessments for social service programs and policies. The Nebraska Department of Health and Human Services contracted with STEPs in the summer of 2019 to complete a needs assessment that includes a literature and web review to gauge the state of knowledge related to individuals' drug use behaviors, to inform focus group questions, and to identify methods of future data collection.

Report Background

This foundational report informs the quantitative surveys and qualitative interviews STEPs will conduct with treatment providers in Nebraska. This report can be used by the Drug Overdose Prevention Program to develop state- and community-level crisis response plans to reduce drug misuse, substance use disorders, and drug overdoses.

Key Findings

- **Methamphetamines are the primary drug of concern** for both Nebraska and the Midwest region.[3] Heroin has also been found to be a significant concern for the Midwest region, but less so for Nebraska.[3]

- **Relieving pain was the most commonly reported reason for opioid misuse,** but only 2% of people reported they misused opioids because they were addicted or needed to have the drug.[6]

- **Most people who initiated prescription opioid misuse in 2017 were over 26 years old.**[6] In contrast, most people who initiated use of marijuana, meth, and alcohol were between 18-25 years old.[6]

- **Most prevention programs are aimed at youth** because adolescent substance use is a predictor of developing a substance use disorder in adulthood.[24]

- **State-mandated use of the PDMP for prescribers has been effective in reducing the number of overdose deaths in other states.**[30]

Purpose

This report informs a needs assessment to gauge drug-use behaviors, treatment needs, and prevention efforts through the lens of treatment providers across Nebraska.

Methodology

After determining the scope of the literature review in collaboration with DHHS, researchers gathered relevant information from a variety of sources. The primary areas of interest include:

- National and Nebraska statistics.
- Prevention.
- Initiation to drug use.
- Treatment.

Data Sources Used

This literature review includes a combination of scholarly articles, federal and state agency documents, and key stakeholder publications. Local news sources were also reviewed to capture current information relevant to Nebraska.

- **At the national level, approximately 15 million people were in need of substance abuse treatment but did not receive any in 2017.**[6] For those who recognized they needed treatment, the number one reported barrier to treatment was not being ready to stop using.[6]

Introduction

Overdose deaths directly related to heroin and opioid pain relievers have been increasing both nationally and internationally.[1] Within the United States, drug overdose deaths have increased from 9.3 to 16.3 per 100,000 people.[2] Although Nebraska drug overdose deaths have not been impacted with the same magnitude, rates in opioid-related deaths from 2005 to 2015 have increased from 2.4 per 100,000 to 3.0 per 100,000.[2] National data from 2016 indicates that 30% of drug overdoses were due to opioids.[2]

Table 1.1 was extracted from the 2018 Midwest High Intensity Drug Trafficking Area (HIDTA) Threat Assessment and shows the number of deaths attributed to overdose in the six states of the Midwest region.[3] Four of the six states experienced an increase in the percent of overdose deaths from 2015 to 2016, while both Nebraska and Kansas showed a decrease.[3]

Table 1.1 **Drug Overdose Deaths in the Midwest HIDTA Region, 2015 and 2016**[3]

State	2015	2016	Difference
Iowa	309	314	+ 2%
Kansas	329	313	– 5%
Missouri	1,066	1,371	+ 30%
Nebraska	**126**	**120**	**– 5%**
North Dakota	61	77	+ 26%
South Dakota	65	69	+ 6%
All Midwest HIDTA states	1,956	2,264	+ 16%

An increased national focus on opioid abuse is primarily due to increased overdose deaths and hospitalizations associated with opioid use. According to the Addiction Center, the number of deaths attributed to opioid abuse have increased to over 40,000 a year, or 115 deaths a day.[4] Accidental opioid-related overdose is now the leading cause of accidental death in the United States.[4] It is imperative, therefore, to understand the factors leading to opioid abuse in the effort to reduce the number of overdose deaths nationwide.

This report provides an overview of Nebraska-specific substance use data, protective and risk factors for substance use, and evidence-based practices for prevention and treatment.

National Statistics

Estimates from the 2017 National Survey on Drug Use and Health indicated 30 million people 12 years of age or older were current illicit substance users. This demonstrates a 20% increase from the estimated 25 million current illicit drug users in 2013.[5,6] The 18- to 25-year-old age group had the highest percentage of illicit drug users in both years with 22% in 2013, and 24% in 2017.[5,6]

Table 1.2 shows the number of people who reported using illicit substances in the past month for 2013 and 2017.[5,6]

Table 1.2 **National Current Illicit Drug Use in 2013 Compared to 2017**
Marijuana was the most used illicit drug, followed by prescription pain relievers for both time frames.[6] Although being the second most common illicit drug used in 2017, "pain relievers" was the only drug to show a decrease from 2013. The other six drug categories showed either an increase or stayed the same.

Current Use (within the past 30 days)		
Substance	**2013[5]**	**2017[6]**
Marijuana	19.8 million	26 million
Pain relievers[i]	4.5 million	3.2 million
Cocaine	1.5 million	2.2 million
Stimulants[ii]	1.4 million	1.8 million
Tranquilizers[iii]	1.7 million	1.7 million
Methamphetamine[iv]	595,000	774,000
Heroin	289,000	494,000
Total	24.5 million	30.5 million

i. Includes hydrocodone, oxycodone, tramadol, codeine, morphine, fentanyl, buprenorphine, oxymorphone products, Demerol®, hydromorphone, methadone, or any other prescription pain reliever.
ii. Includes amphetamine products, methylphenidate products, anorectic (weight-loss) stimulants, Provigil®, or any other prescription stimulant.
iii. Includes benzodiazepine tranquilizers (including alprazolam products, lorazepam products, clonazepam products, or diazepam products), muscle relaxants, or any other prescription tranquilizer.
iv. Methamphetamine use was also included in stimulant use category for 2013 data. Methamphetamine, produced or distributed illicitly, had its own category in 2017.

National Statistics

In 2017, 11.4 million people had misused opioids within the past year.[6] Of those, the vast majority (11.1 million) misused prescription pain relievers compared to 886,000 people who misused heroin.[6] Most heroin users (64%) had also misused a prescription pain reliever in the past year, but only 5% of prescription pain reliever misusers also used heroin. An estimated 6 out of 10 individuals who misused opioids noted the last time they misused opioids was to relieve physical pain (p. 1).[6] Approximately half of people who misused opioids obtained the opioid from a friend or relative (p. 1).[4]

Table 1.3 provides national estimates on the overall misuse or illicit use of substances within the past year from the 2017 National Survey on Drug Use and Health.[6]

Table 1.3 **National Illicit Drug Use in the Past Year for 2017**
More opioid users reported using prescription pain relievers.

Substance	Number of Users
Opioids	11.4 million
Prescription pain relievers	11.1 million
Heroin	886,000

Nebraska Statistics

The 2018 Midwest High Intensity Drug Trafficking Area Threat Assessment (HIDTA) identifies illicit drug trends and concerns in Nebraska and the Midwest region's six-state area. Methamphetamines are ranked as the number one drug threat for both Nebraska and the Midwest region. The report notes that methamphetamine continues to increase in availability and decrease in price throughout Nebraska.[3]

The next drug of concern for Nebraska is controlled prescription drugs (CPDs); within the Midwest, CPDs are ranked third and heroin is ranked second. However, in Nebraska, heroin is less of a concern and is ranked fifth.[3] Fentanyl, however, is described as a relatively new threat.[3] Although the HIDTA report states that fentanyl has not been reported in more rural areas yet, STEPs' recent survey and focus group analysis identified that fentanyl had penetrated in the more rural areas of the state.[7] CPDs are believed to be readily and easily available within the Midwest region and Nebraska.

Nebraska Statistics

Drug Threats

Understanding the drug threats at both the state and Midwest regional levels provides an opportunity for Nebraska to develop strategies to address current and emerging needs. Table 1.4 shows the greatest drug threats in Nebraska and across the Midwest with methamphetamine ranked as the number one concern in both areas.[3]

Table 1.4 **Greatest Drug Threats for Nebraska and across the Midwest**
Methamphetamine is ranked as the number one concern for both Nebraska and the Midwest.

Ranking	Midwest Drug Threats	Nebraska Drug Threats
1	Methamphetamine	Methamphetamine
2	Heroin	Prescription drugs
3	Prescription drugs	Marijuana
4	Marijuana	Cocaine
5	Cocaine	Heroin
6	Synthetics/club drugs	Synthetics/club drugs

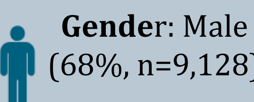
The 2018 Midwest HIDTA report provides an understanding of the emerging trends. The report surmises that the majority of the increase in drug overdose deaths in the region can be attributed to opioid abuse, particularly the abuse of heroin and synthetic opioids.[3]

The report further states that synthetic opioids are increasingly mixed with other drugs unbeknownst to the users. This is perceived to be a factor in the current and future drug overdose death rates in the Midwest region. There is particular concern for those who transition from prescription opioids to heroin and synthetic opioids, including non-pharmaceutical fentanyl.

Nebraska Treatment Admission Demographics for 2017[8]
There were 13,467 admissions to substance use treatment programs in Nebraska in 2017. The majority of people admitted were between 25 and 44 years old, non-Hispanic White, and male.

Age: 25-44 years old (59%, n=7,878)

Race: Non-Hispanic White (73%, n=9,225)



Gender: Male (68%, n=9,128)

Nebraska Statistics

Nebraska Treatment Admissions

Substance use treatment programs in Nebraska processed 13,467 admissions in 2017.[8] This was the lowest number of admissions in Nebraska in the past 10 years, and substantially lower than the number of admissions in 2016 (n=18,098).[8]

Of the people admitted in Nebraska, nearly 4,000 reported being polysubstance users. 49% of those admitted reported polysubstance use with an illicit substance as their primary drug and alcohol as their secondary drug.[8] However, no data was provided on the specific primary drugs used in these cases of polysubstance use. About 51% of people admitted had alcohol as their primary drug with another substance as their secondary drug.[8]

It is important to note that a percentage of those who reported their primary drug as methamphetamine, marijuana, non-heroin opiates, cocaine, and heroin users may also be included in the 1,808 who use alcohol as their secondary drug.

Table 1.5 shows the number of individuals admitted to substance use treatment based on their primary substance used.[8]

Polysubstance Use[8]

Polysubstance use admissions made up nearly half of all admissions in 2017. In 2017, there were:

- **3,732** polysubstance admissions.
- 1,924 of polysubstance admissions used alcohol as their primary drug and another drug as their secondary drug.
- 1,808 of polysubstance admissions used another drug as their primary drug and alcohol as their secondary drug.

Table 1.5 **2017 Substance Use Treatment Admissions for Nebraska[8]**
Methamphetamine was the second most common substance at admission.

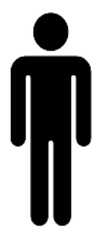
Primary Substance Used at Admission	Number of Admissions
Alcohol only	5,660
Alcohol + secondary drug	1,924
Methamphetamine	3,141
Marijuana	1,309
Non-heroin opiates	371
Cocaine	160
Heroin	93
Total admissions	13,467

Risk and Protective Factors

With opioids being used more frequently for non-medical purposes, it becomes of interest to identify the risk and protective factors involved in ones likelihood to engage in substance use.

Risk Factors

Risk factors for substance use are similar to risk factors for other concerning problems. Research demonstrates that the earlier a person begins using drugs, the more likely they are to develop both substance use and mental health disorders.[9] Below is a listing of three primary types of risk factors identified in the literature: Individual, Family, and Environmental.



Individual Risk Factors

- Previous substance use[10]
- Behavior disinhibition as an adolescent[11]
- Co-occurring mental illness[11]
- Experiencing online or in-person bullying[10]
- Psychological distress[12]
- Uninsured[12]
- Mental illness[5]
- Fewer years of education[13]
- Poor grades in school[10]

Family Risk Factors

- Cohabitation with parents who sold drugs or have been incarcerated[13]
- Cohabitation with partner who sold drugs or has been incarcerated[13]
- Parent or peer substance use as an adolescent[11]
- Parents who would not feel strongly about child drug use[14]
- Lack of a stable home or family[5]
- Residential mobility in adolescence[15]
- Genetic predisposition to substance use disorders [16]
- Interpersonal violence, abuse, or neglect[17]

Environmental Risk Factors

- Adverse Childhood Experiences[14]
- Potentially traumatic experiences[17]
- Low food security (for women with or at risk for HIV)[18]

Risk and Protective Factors

Methamphetamine-Specific Risk Factors

Risk factors for substance use are interrelated with risk factors for other physical, mental, and social problems. Risk factors specific to methamphetamine users found within the literature are similar to risk factors for other substance use disorders. However, the high threat of methamphetamine use in both Nebraska and the Midwest region prompt our mention of methamphetamine-specific factors.

Female methamphetamine users were more likely to be abused as a child, lived with parents/partner who sold drugs or had been incarcerated, had a mental health diagnosis, had children living with them, had fewer years of education, and began methamphetamine use earlier.[13] Populations determined to be critically affected or disproportionally impacted by methamphetamine use include “incarcerated populations, LGBT individuals, women of childbearing years, American Indians/Alaska Natives, Latinos/Latinas, and Asian/Pacific Islander populations” (p. 11).[20]

Protective Factors

Protective factors are those characteristics at the individual, family, or environmental level that can potentially reduce the likelihood of developing a problem such as substance abuse. The following protective factors are associated with positive outcomes in terms of substance use.

Individual Protective Factors

- Positive temperament[9]
- Social coping skills[9]
- Positive social orientation[9]
- Belief in one’s ability to control what happens and to adapt to change[9]
- Participating in extracurricular activities or groups[10]
- Participating in activities that prohibit drug or alcohol use[10]
- High self-esteem[10]
- Believing strongly in the risk and harm of drug use[14]
- Living in a rural area[19]
- Higher level of education[19]

Family Protective Factors

- Unity[9]
- Warmth[9]
- Parental attachment[9]
- Parental supervision[9]
- Contact and communication between parents and children[9]

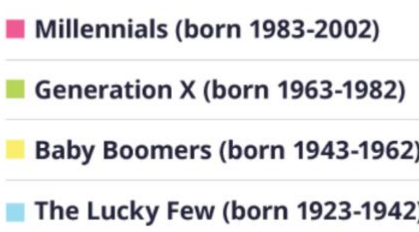
Risk and Protective Factors

Environmental Protective Factors
• Positive emotional support outside the family (friends, neighbors)[9] • Support and resources available to the family (family counseling, trauma programs, crisis lines)[9] • Community and school norms, beliefs, and standards against substance use[9] • Schools characterized by academic achievement and students who are committed to school[9] • Attending a school with policies against substance use[10]

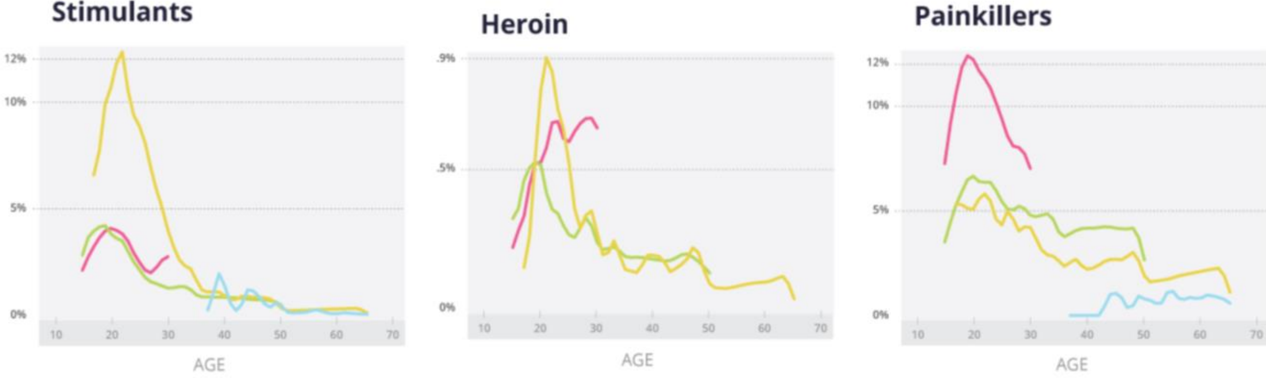
Generational Differences

In addition to risk and protective factors, generational differences were also identified with respect to substance use. Through analyzing data from the 2007-2016 National Survey on Drug Use and Health, Baby Boomers were found to be at lower risk for all substance use (p. 3).[21] In contrast, Millennials were significantly more likely to use cocaine, heroin, and OxyContin® than Generation X or Baby Boomers (p. 12).[21] Generation X was found to be more at risk for polysubstance use and crack use (p. 9).[21] **Currently, Millennials are more at risk for substance use than any other generation.**[21]

As demonstrated in the following graphs, at peak age, Baby Boomers' use of stimulants such as methamphetamines was nearly three times that of Generation X or Millennials.[21] A higher percentage of Millennials, however, use painkillers at all ages compared to Generation X or Baby Boomers.[21]



Substance Use by Generational Cohort



*Data from the 1987-2013 National Survey on Drug Use and Health were used in the preceding graphs.[21]

Evidence-Based Prevention Programs

Categories of Prevention

Prevention programs are designed to decrease or eliminate risk factors and enhance protective factors.[24] Evidence-based prevention programs are those strategies proven to be effective through high-caliber research.

Substance abuse prevention programs are divided into three categories, which are defined in Table 2.1: Universal Prevention, Selective Prevention, and Indicative Prevention.[14]

Table 2.1 **Prevention Strategy Categories**[14]

Universal	Address risk and protective factors common among all people in a given setting (e.g. youth under 18 years old)
Selective	For groups who have specific factors that put them at increased risk of drug use (e.g. justice-involved youth)
Indicative	Designed for those already using drugs

Prevention efforts are also divided into Levels of Prevention, as shown in Table 2.2. Unlike the Prevention Strategy Categories, Levels of Prevention are divided based on the stage of addiction or dependence. For example, both Universal and Selective Prevention Strategies are considered to be implemented at the Primary level of prevention because they inhibit substance use initiation. Both Indicative Strategies and Tertiary Levels of Prevention, however, are targets at those who are already involved in illicit substance use.

Table 2.2 **Levels of Prevention**[26]

Primary	Preventing new cases of addiction from being initiated
Secondary	Interventions to prevent early substance use from moving to substance use disorder
Tertiary	Ensuring access to treatment and rehabilitation services (to prevent overdoses, medical complications, transition to injection drug use, injection-related diseases)

Evidence-Based Prevention Programs

Primary Prevention

Universal prevention strategies target all people in a given context and are based on three main concepts:[14,25]

1. Parents and their children must understand that substance use in adolescence will affect their brain development.
2. Adolescents who view substance use as risky are significantly less likely to use drugs.
3. Substance use significantly decreases the longer substance use initiation is delayed.

The Primary Level of Prevention has a narrower target population than Universal Prevention strategies because it aims to prevent new cases of substance use. Most primary prevention strategies are aimed at youth because substance use disorders are development diseases that typically begin in adolescence.[24] A risk factor for adult substance use disorders is illicit drug use during adolescence. Prevention programs aim to instill an understanding of the risk of misusing substances during adolescence. Between 2011 and 2012, only 0.3% of people who used an illicit drug for the first time were above the age of 26 (p. 12).[24]

Additionally, schools provide a useful setting for the implementation of prevention programs. In contrast, implementing prevention programs for adults is more limited. For adults who are not involved in the justice system, child welfare system, or treatment programs, media campaigns were the only primary prevention program aimed at illicit substance use.

Methods of Prevention

Media campaigns are a method of prevention that can be used within any level or strategy of prevention. In addition to being categorized by strategy (Universal, Selective, Indicative) and level (Primary, Secondary, Tertiary), SAMHSA presents six methods of prevention programs shown in Table 2.2.[9]

Table 2.2 **Methods of Prevention**[9]

Method	Description
1. Information dissemination	Classroom speakers or media campaigns to increase knowledge and change beliefs
2. Prevention education	Teach social skills, such as resisting peer pressure or developing other healthy choice making skills
3. Positive alternatives	Structured, enjoyable activities to enjoy free time in healthy ways

Evidence-Based Prevention Programs

Table 2.2 **Methods of Prevention** (continued)[9]

4. Environmental strategies	Change policies/conditions in work and socialization, such as enforcing liquor stores checking IDs
5. Community-based processes	Networking, planning, and coalition building to increase effective prevention and treatment strategies
6. Identification of problems and referral to services	Determine who is at risk and what interventions/protections need to be put in place

For the purpose of this report, prevention programs supported by the literature will be divided into Universal, Selective, and Indicative, and then further divided by the implementation setting.

Universal: Address risk and protective factors common among all people in a given setting (e.g. youth under 18 years old).	
School-Based[27]	• Caring School Community Program (now Center for the Collaborative Classroom) • Classroom-Centered (CC) and Family-School Partnership (FSP) Intervention • Promoting Alternative Thinking Strategies (PATHS) • Guiding Good Choices • Botvin Life Skills Training (LST) Program • Lions-Quest Skills for Adolescence (SFA) • Project ALERT • The Strengthening Families Program: For Parents and Youth 10–14 • Lions-Quest Skills for Adolescence • Project ALERT Plus
Community-Based	• AWARxE Prescription Drug Safety Program

Evidence-Based Prevention Programs

Universal: Address risk and protective factors common among all people in a given setting (e.g. youth under 18 years old).

Community-Based	• Good Drugs Gone Bad • Generation RX • Above the Influence • Use Only As Directed • SAMHSA's Strategic Prevention Framework (SPF)[9]
Policy	• State-mandated prevention education in schools[28] • Mandatory Prescriber Education Legislation • Mandated use of the Prescription Drug Monitoring Program

Media or Social Media	• United States Drug Enforcement Agency Initiatives (may or may not be evidence-based):
	  ◦ Red Ribbon Campaign
	  ◦ National RX Drug Take Back Day

Selective: For groups who have specific factors that put them at increased risk of drug use (e.g. justice-involved youth)

School-Based[27]	• Focus on Families (FOF) now known as Families Facing the Future • The Strengthening Families Program (SFP) • Coping Power • Adolescents Training and Learning to Avoid Steroids (ATLAS)
Community-Based	• Skills & Knowledge on Overdose Prevention (SKOOP) • Drug Overdose Prevention & Education Project (DOPE) • Behavioral Health Equity • Communities that Care • Creating Lasting Family Connections[29] • Screening, Brief Intervention and Referral to Treatment (SBIRT) • Project Lazarus • Community Anti-Drug Coalitions of America

Evidence-Based Prevention Programs

Selective: For groups who have specific factors that put them at increased risk of drug use (e.g. justice-involved youth)	
Policy	• Integrating Substance Use Treatment into Mainstream Health Care[14] • Opioid manufacturers develop formula difficult to inject or ingest intranasally[30]
Media or Social Media	• Partnership For Drugs-Free Kids (Drugfree.Org) • Parent Addiction Network (PAN) https://safercommunity.net/parent-addiction-network-home/ • Medicine Abuse Project (medicineabuseproject.org)

Indicative: Designed for those already using drugs	
School-Based[27]	• Fast Track Prevention Trial for Conduct Problems • Adolescent Transitions Program (ATP) • Project Towards No Drug Abuse (Project TND) • Reconnecting Youth Program (RY)
Community-Based	• Healthy Lifestyle Coaching[33]
Policy	Opioid addiction most commonly develops in both medical and nonmedical users when taken orally (p. 566).[30] A potential deterrent to further lessening the risk of opioid use is create oral forms of opioids that are difficult to misuse via intranasal or injection. This does not prevent opioid misuse as a primary prevention measure; however, it does help prevention the potential of misusing it through injections. Recommended policy interventions include (pg. 32):[30] • Dram Shop (Commercial Host) Liability Laws, which hold businesses liable for selling alcohol to visibly intoxicated customers and for damages causes by significantly intoxicated customers. • Electronic Screening and Brief Interventions. • Mandated utilization of the PDMP and other health care system technologies

Evidence-Based Prevention Programs

Indicative: Designed for those already using drugs

Media or Social Media	• Poster campaign to prevent the initiation of injection drug use A media campaign to prevent street youth from initiating drug injection was carried out in 2005 in Montreal, Canada.[29] The goal of the poster campaign was to prevent vulnerable street youth who seek social valorization from moving to injection drug use.[29] Posters were hung in public places and community organizations frequently visited by street youth. Surveys and interviews were conducted with youth who inject drugs. Surveyed youth who inject drugs found the campaign to be effective in preventing their peers from beginning drug injection and causing them to reflect on their own drug injection use. The "Scars" and "Wrists" posters were shown to be most impactful to interviewed youth.[29] While this campaign was aimed at street youth, the potential effectiveness of the message on adults is unknown. The posters used in the Canadian campaign are shown in the table below.[29]

Logo	'Freedom' poster	'Scars' poster	'Loneliness' poster	'Wrists' poster	'Prostitution' poster	'Consequences' poster
	The slogan says:	The slogan says:	The slogan says:	The slogan says:	The slogan says:	The slogan says:
	'Freedom?'	'You never know where one hit can lead'	'The first time, there were three of us'	'I only wanted to try it once. That was 2 years ago'	'Buying a hit can cost you a lot'	'It'll rob you of your money, your friends, your family, your life'
Addiction due to injecting drugs	Addiction due to injecting drugs	Physical consequences of injecting drugs	Loneliness, deterioration of social ties, death of friends	Addiction due to injecting drugs	Prostitution as an activity in which IDUs frequently become involved, even if they do not want to, in order to pay their drugs	The significant losses experienced by IDUs

Evidence-Based Prevention Programs

Harm Reduction Strategies (Indicative)

Harm reduction strategies fall under the Indicative strategy and Tertiary level of prevention. Harm reduction strategies "provide public health-oriented, cost-effective, and often cost-saving services to prevent and reduce substance use-related risks among those actively using substances, and substantial evidence supports their effectiveness" (p. 18).[34] Examples of harm reduction strategies include:

- needle or syringe exchange programs.
- safe injection sites.
- increased access and training to naloxone.

Research shows that needle and syringe exchange programs are effective in reducing HIV transmission without increasing injection drug use.[14] They also provide the opportunity to engage with people who inject drugs as a point of referral for treatment or support services.[14] Evidence supports clients in these syringe exchange programs being given naloxone and being trained on how to use it on their peers.[26]

Substance Use Initiation

Data from a cohort of individuals who were admitted into substance use treatment programs in 2017 were asked how old they were when they began their illicit drug use. The majority of respondents indicated their drug use initiation began between the ages of 21 and 24. Of these, 54% indicated the primary substance leading up to the treatment admission was opioids (p. 55).[8]

Initiation to illicit drug use increased significantly between 2013 and 2017 for marijuana, pain relievers, tranquilizers, psychotherapeutic stimulants (including prescription forms of methamphetamine), and illicitly produced methamphetamine.[5,6]

Table 3.1 **Illicit Drug by Number of Recent initiates**

Substance	2013[5]	2017[6]
Marijuana	2.4 million	3 million
Nonmedical use of pain relievers[i]	1.5 million	2 million
Nonmedical use of tranquilizers[ii]	1.2 million	1.4 million
Methamphetamines[iii]		
a. Nonmedical use or misuse of psychotherapeutic stimulants[5,6]	603,000	1.1 million
b. Methamphetamine, produced and distributed illicitly[6]	144,000	195,000

In contrast to initiation patterns of cigarettes, alcohol, meth, and marijuana, most people who initiated prescription opioid misuse in 2017 were 26 years or older. The 18 to 25 age group was the largest age group of individuals who initiated methamphetamine use in 2017.[6]

Table 3.2 displays substance use initiation by age in 2017.

i. Includes products with hydrocodone, oxycodone, tramadol, codeine, morphine, fentanyl, buprenorphine, oxymorphone, Demerol®, hydromorphone, methadone, or any other prescription pain reliever.

ii. Includes benzodiazepine tranquilizers (including alprazolam products, lorazepam products, clonazepam products, or diazepam products), muscle relaxants, or any other prescription tranquilizer.

iii. In 2015, a new set of questions were created and administered separately from the questions about the misuse of prescription stimulants.[1]

Substance Use Initiation

Table 3.2 **Initiation by Age in 2017**[6]

Substance	Age 12-17	Age 18-25	Age 26 or older
Prescription pain reliever misuse	316,000	465,000	**1.2 million**
Psychotherapeutic stimulant misuse	217,000	**581,000**	394,000
Methamphetamine use	27,000	**95,000**	73,000

Below are some additional facts regarding substance use initiation.

Urban and Rural Differences

According to the 2011–2012 National Survey on Drug Use and Health, urban individuals were significantly more likely to report cocaine, hallucinogen, and marijuana use (p. 26).[12] **Rural respondents were significantly more likely to report non-medical opioid use and meet the criteria for opioid-use disorder** (p. 26).[12] Rural respondents also had a lower probability of cocaine use compared to their urban counterparts (p. 27).[12]

Drug Injection Trends

According to a study in Baltimore, Maryland, **people born after 1980 and who were currently injecting drugs were more likely to initiate drug use with prescription drugs compared to the initiation with heroin and cocaine of early generations**.[35] People born after 1980 and who were currently injecting drugs also had higher rates of polysubstance use prior to beginning injection drug use.[35] People who inject drugs between 40 and 44 years of age had the highest rates of mortality, women in particular.[35]

Reasons for Opioids Misuse

According to the 2017 National Survey on Drug Use and Health, the top reason for opioid misuse was to relieve physical pain (p. 21).[6] This was followed by desires to experience a high or relax. **Only 2% of people reported misusing opioids because they were addicted.**[6] This may inform prevention efforts to increase public awareness of the highly addictive nature of opioids when misused.[6]

Substance Use Initiation

Reasons for Opioids Misuse (continued)[6]
The following list provides the top reported reasons for opioid misuse in order of frequency.

1. **Relieve physical pain (63%)**
2. Feel good or get high (13%)
3. Relax or relieve tension (8%)
4. Help with sleep (5%)
5. Help with feelings or emotions (4%)
6. Experiment or see what drug was like (3%)
7. **Because they were "hooked" or needed to have the drug (2%)**
8. Increase or decrease the effects of other drugs (1%)

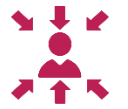
Source of Last Misused Pain Reliever (p. 21)[6]
In 2017, approximately half of misused pain relievers were obtained from friends or relatives, most of which were obtained for free (39%).[6] Approximately one-third of misused pain relievers were obtained from a healthcare provider through either a prescription or stolen.[6] According to the 2018 Midwest HIDTA report, the most often used methods of accessing CPDS include theft from family/friends, doctor shopping, and prescription fraud.[3]

Table 3.3 **Source of Prescription Pain Relievers**

Source	Percentage
Received from friend/relative	**53%**
Healthcare provider (prescription or stolen)	37%
Bought from drug dealer or stranger	6%
Other source	5%

Regardless of the source, addiction to both medical and nonmedical opioids is the driving factor of the opioid crisis. However, national data on opioid use disorders exclude those who are addicted to opioids that were prescribed to them.[26]

Substance Use Initiation



Source of Last Misused Pain Reliever (p. 21)[6]
According to one study, four out of five heroin users began using opioids through prescription opioids (p. 560).[26] Both heroin and prescription opioid initiation has been shown to lead to the misuse of other substances and more risky drug use behaviors, such as drug injection. People perceive prescription pain relievers as less risky than heroin use or occasional marijuana use, but abuse liability is approximately the same.[26] Furthermore, those who perceive low levels of opioid risk are nearly 10 times as likely to misuse opioids.

Polysubstance Use Preferences
Surveyed methamphetamine users identified they preferred using methamphetamine with alcohol and marijuana more than any other substance.[6]

Preferred Substances Used with Meth:

1. Alcohol (42%)
2. Cannabis (38%)
3. Powder cocaine (20%)
4. Crack Cocaine (19%)
5. Heroin (19%)
6. Alprazolam (18%)

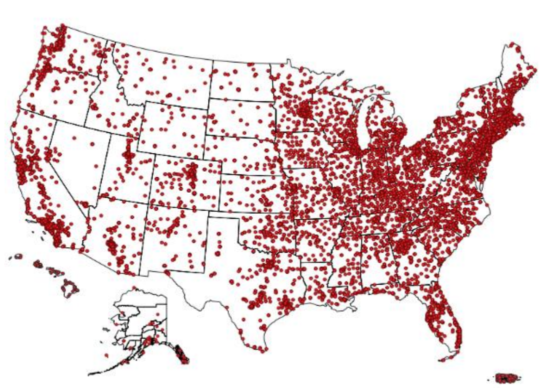
Prescription Opioid Misuse to Heroin Initiation

Research has determined the initiation of non-medical prescription opioid use is a strong predictor of heroin initiation among U.S. veterans who reported no previous illicit drug use.[36] The risk of heroin initiation was also higher for:

- Male individuals.
- Black and Hispanic individuals.
- Those with a history of mental illness.

Screening veterans for prior or current prescription opioid misuse may play a significant role in the targeted prevention of heroin initiation.[36]

Treatment Options



National Treatment Facilities
In 2017, approximately 1 in 13 Americans required substance use treatment. For those ages 18-25 years old, however, this number was 1 in 7.[8]

SAMHSA identified three main types of substance abuse treatment in the 2017 National Survey of Substance Abuse Treatment Services (N-SSATS):[37]

1. Outpatient.
    - Regular
    - Intensive
    - Day treatment/partial hospitalization
    - Detox
    - Methadone maintenance
2. Residential or inpatient (approximately 2,752 facilities nationwide in 2017).
    - Short-term (less than 30 days)
    - Long-term (more than 30 days)
    - Detox
3. Hospital inpatient (approximately 473 facilities nationwide in 2017).
    - Treatment
    - Detox

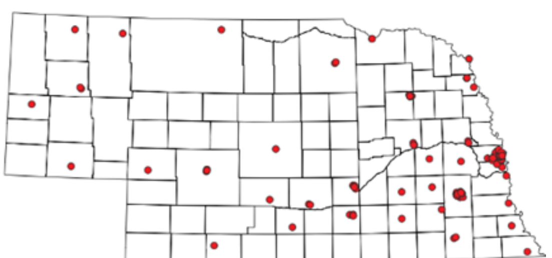
N-SSATS National data showed 13,585 substance abuse treatment facilities with approximately 1.3 million individuals receiving treatment on March 31, 2017. Over half of these individuals were receiving treatment for drug abuse only.[37]

Nebraska Treatment Facilities

This report also includes data for Nebraska, using the same parameters for facilities and number of individuals receiving treatment. Nebraska has 125 substance abuse treatment facilities which responded to the N-SSATS, with 6,461 clients reported in treatment on March 31, 2017, one-third of which were receiving treatment for drug abuse only. The overwhelming majority of these clients (87%) were receiving outpatient treatment at that time.[31]

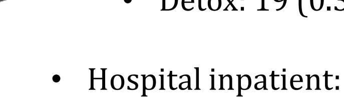
Treatment Options

Nebraska Treatment Facilities



- Outpatient: 5,604 (87%) clients
  - Regular: 4385 (68%)
  - Intensive: 606 (9%)
  - Day treatment/partial hospitalization: 13 (0.2%)
  - Detox: 65 (1%)
  - Methadone maintenance: 535 (8%)

- Residential: 828 clients (13%)
  - Short-term: 321 (5%)
  - Long-term: 488 (8%)
  - Detox: 19 (0.3%)



- Hospital inpatient: 29 (0.4%)
  - Treatment: 12 (0.2%)
  - Detox: 17 (0.3%)

- Opioid treatment programs (3 facilities, 0.2% of all OTP facilities in the U.S.)
  - Any Medicated-Assisted Treatment: 560 (0.1%)
  - Methadone: 427 (0.1%)
  - Buprenorphine: 120 (0.4%)
  - Naltrexone: 13 (0.4%)

  (All OTP percentages are percentages of all clients in the U.S.)

Table 4.1 **Nebraska Facilities and Clients in Treatment 2007-2017**[37]

Year	Facilities	Clients	Clients/Facilities
2007	114	5,436	47.6
2009	114	4,864	42.6
2011	123	6,354	51.6
2013	114	6,374	55.9
2015	132	5,735	43.4
2017	125	6,461	51.6

Treatment Options

Facility Capacity and Utilization Rate

Residential Utilization Rate: 97%

- Residential Facilities: 33
- Residential Clients: 795
- Residential Beds: 816

Hospital Inpatient Utilization Rate: 7%

- HI Facilities: 1
- HI Clients: 2
- HI Beds: 29

Referrals to Treatment

Of those who completed treatment* in 2017, nearly half were self-referred to treatment (43%, n=688,306) and nearly one-third were referred by the criminal justice system (29%, n=463,595).[8] The remaining 28% of discharges with admission data were referred by other community resources (10%, n=165,896), a substance use care provider (9%, n=147,669), school/education (7%, n=10,427), or an employer/EAP (<1%, n=5,852).[8]

Unmet Need for Treatment

Of the nearly 21 million people identified as needing substance use treatment in the 2017 National Survey on Drug Use and Health, only 4 million people received treatment.[6] While the treatment gap contains a greater number of people in the 26 and older age group, a larger percentage of the 18 to 25 age group lacked necessary substance use treatment.[6]

Table 4.2 **National Gap in Substance Use Treatment by Age**[6]

Age Group	Need	Received Treatment	Treatment Gap
Age 12-17	1 million (4%)	184,000 (1%)	816,000
Age 18-25	5.2 million (15%)	641,000 (2%)	4,559,000
Age 26 or older	14.5 million (7%)	3.2 million (2%)	11,300,000
Total	20.7 million	4 million	15.3 million

* "Completion of treatment" does not include transfers to another facility for further treatment, dismissals from treatment, dropouts from treatment, death of client, incarceration prior to treatment completion, or other termination of treatment prior to completion.[4]

Treatment Options

Barriers to Accessing Treatment

The list below displays the top reasons for people who feel they need treatment to not receive treatment. The most frequently stated reason was not being ready to stop using.[6] However, "not having health care coverage" and "concerns that it would have a negative effect on one's job" closely followed.[6]

Reasons for not Receiving Treatment for Those Who Felt They Needed Treatment[6]

1. Not ready to stop using (40%)
2. No healthcare coverage (30%)
3. Might have negative effect on job (21%)
4. Might cause neighbors or community to have negative opinion (17%)
5. Did not know where to go for treatment (11%)

Another frequently reported reason for not receiving substance use treatment among those who felt they needed it involved concerns that it would negatively impact their job.[6] However, buprenorphine is an effective opioid dependency treatment that allows people to continue working, regardless of profession.[6]

Methamphetamine Barriers to Accessing Treatment:

The most common barrier to accessing methamphetamine treatment are psychosocial, such as embarrassment or stigma, preferring to go through withdrawal alone, or concerns regarding privacy.[38] Practical barriers to methamphetamine treatment include lack of available services, waiting lists and waiting times, cost (for females in particular), and a lack of treatment services that accommodate women caring for dependent children.[38]

Methamphetamine Barriers Related to Service Providers:

Among surveyed service providers, the behavior of patients was viewed a barrier to their treatment and resulted in some patients being asked to leave the facility until they are more stable.[38] Service providers also noted a shortage of clinicians trained to treat methamphetamine dependency and a shortage of those trained to treat co-occurring polysubstance use and mental illness.[38] Methamphetamine users also identified the negative perception of meth users from facility staff as a barrier to treatment.[34]

Treatment Options

Client Outreach

Just over 60% of treatment facilities nationwide provide outreach to those in the community who may need treatment.[37] In Nebraska, approximately 50% of treatment facilities provide outreach to community members.[37]

Evidence-Based Treatment Programs

Evidence-based treatment programs use models proven to be effective through high-caliber research. Overall, Nebraska utilized evidence-based treatment methods in conjunction with substance use treatment. Table 4.3 shows national and Nebraska rates of treatment modality use. Clinical therapeutic approaches "always or often" or "sometimes" used by treatment facility professional (p. 155):[39]

Table 4.3 **Percent of Substance Use Treatment Facilities that use Evidence-Based Treatments for both Nebraska and Nationally**

Treatments Used	National	Nebraska
Substance abuse counseling	99%	95%
Relapse prevention	96%	95%
Cognitive-behavioral therapy	94%	98%
Motivational Interviewing	93%	94%
Anger management	83%	84%
Brief intervention	82%	87%
12-step facilitation	73%	77%
Trauma-related counseling	79%	90%
Contingency management	56%	56%
Rational Emotive Behavioral therapy	46%	56%
Matrix Model	44%	42%
Computerized substance abuse treatment	15%	21%
Community reinforcement plus vouchers	12%	19%
Dialectical Behavior Therapy	55%	70%
Other treatment approaches	8%	6%

Treatment Options

Opioid Treatment Options

Methods of substance use treatment for opioid addiction and dependence (including prescription drugs, heroin, fentanyl) are:

1. Detox followed by abstinence.
2. Detox followed by monthly shots of naltrexone.
3. Medicated assisted treatment with buprenorphine.
4. Medicated assisted treatment with methadone.

Methamphetamine and Other Substance Treatment Options

Several treatment methods or models can be applied to the treatment of methamphetamine users.[39] Examples of these methods are:

- The Matrix Model.
  This method of treatment is framed for users of methamphetamine and cocaine to aid in engaging users in treatment and helping achieve abstinence. Several studies have shown a statistically significant reduction in drug use for individuals treated with this model.[40]

- Cognitive-Behavioral Therapy.
  Originally developed to treat alcohol abuse, it has been adapted to address marijuana, cocaine, methamphetamine, and nicotine use. This method focuses on teaching users to identify and correct problem behaviors by using skills to stop drug abuse and address problems that occur with drug abuse.[40]

- Contingency Management Interventions/Motivational Incentives.
  Treatment methods that employ contingency management, which involves giving patients tangible rewards to reinforce positive behaviors like abstinence, have been shown to be highly efficient in-patient retention and abstinence.[40]

Table 4.4 **Facilities Detoxifying Clients in 2017 by Substance** (p. 165)[39]

	Opioids	Alcohol	Benzos	Cocaine	Meth	Other	Routine use of medications during detox
National	2,430	1,813	1,642	1,405	1,407	194	2,325
Nebraska	11	13	8	11	11	0	11
National	91%	68%	62%	53%	53%	7%	87%
Nebraska	79%	93%	57%	79%	79%	0%	79%

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